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Nevada Site Specific Advisory
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Meeting
5:00 PM PST

August 2016

9-10

Third Annual
Intermountain
Energy Summit
Idaho Falls, ID
[Visit website.](#)

September 2016

14-15

DOE National Cleanup
Workshop
Hilton Alexandria Mark
Center
Alexandria, VA
[Visit website.](#)

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The Government Accountability Office released a report last week citing concerns about the increasing budget for nuclear weapons and that budget's potential to be inaccurate

The GAO report, titled "Modernizing the Nuclear Security Enterprise," looked at issues facing the National Nuclear Security Administration's budget projections for nuclear weapons.

"This is the fifth year doing this review of modernization plans and the main finding in the report is that the budget estimates may not align with anticipated costs," said David Trimble, director of the U.S. and International Nuclear Security and Cleanup department of the GAO. "Their ability to execute large contracts and large projects is of concern because of the historical problems."

GAO officials cite a cost projection for weapons modernization at \$297.6 billion, which is \$4.2 billion higher than the administration's budget figures. The low-range cost estimates for four programs to extend the life of nuclear warheads were also above the budgeted amount in years past.

Most of the physical work on warheads and bombs for life-extension programs is done at Pantex, which does assembly and disassembly of the warheads and bombs, and at the Y-12 National Security Complex, which manufactures, assembles and disassembles certain key components. Both sites are managed by Consolidated Nuclear Security.

These projections come at an increasingly complex time for the NNSA, as it is ramping up to juggle four major refurbishment programs on four separate warheads: a submarine-launched ballistic missile, a tactical "smart bomb," a submarine-launched ballistic missile and an air-launched cruise missile.

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“In our view, the NNSA has enormous responsibility that is incredibly important and they need to do a lot of work to maintain the U.S. stockpile,” said Stephen Young, senior analyst in the Global Security Program with the Union of Concerned Scientists. “However, they keep planning to go big and do everything perfectly at once in the best possible way. They simply can’t manage that. They need to think small and do what they have to get done to maintain the stockpile or we risk a real problem.”

The NNSA, under the umbrella of the Department of Energy, still remains on the GAO’s Major Program High-Risk List for a record of mismanagement, fraud, waste and abuse. Although the department has made progress in managing work on projects that cost under \$750 million, a pattern of waste in large projects continues.

Testimony from the GAO to the U.S. Senate Strategic Forces Subcommittee highlighted three major challenges facing the Department of Energy: management of the life-extension programs, oversight of contracts and major projects, and budgetary issues.

Of the life-extension programs that are concerning, the “smart bomb” program has a shortage of staff and is proceeding on a constrained schedule with little margin for program risks. Another warhead, the Interoperable Warhead 1, is scheduled to begin modernization in 2020, but the budget is based on a plutonium pit production line that isn’t up to capacity yet.

“Some of the programs, like the W76 (submarine-launched missile), make total sense. It’s the bulk of our stockpile, 1,600 warheads, and has a total cost of \$4 billion,” Young said. “Now for the B61 (“smart bomb”), they are spending \$10 billion to modernize 480 bombs.”

Young pointed out that for the cost of one “smart bomb,” the NNSA could modernize roughly eight of the submarine-launched missiles.

“The NNSA is proposing to make major changes to the warheads, and because they are reaching so far, they risk cost overruns, delays and problems that

have always surfaced in their programs,” Young said. “It greatly increases the risk that one of these will fail. They should just do the work required to make sure our stockpile is safe and effective and nothing more than that.”

Young said he also worries about the choice to modernize the “smart bomb,” which would allow it to hone in on precise targets and vary its payload from 0.3 kilotons to 150 kilotons.

“The goal is not to use these weapons. Some argue you need to be able to fight and win a nuclear war in case one starts, but once you go nuclear, all bets are off,” Young said. “There’s no reason to plan for a small nuclear war.”

Sen. Murray questions DOE commitment to all Hanford cleanup

Tri-City Herald

March 9, 2016

[LINK](#)

The Obama administration’s proposed Hanford budget seems to foreshadow declaring a cleanup victory, leaving critical work unfinished, Sen. Patty Murray said Wednesday.

The Washington Democrat pressed Energy Secretary Ernest Moniz for information on the Department of Energy’s plans during a hearing of the Senate Appropriations Energy and Water Development Subcommittee.

The Obama administration has proposed a 2017 fiscal budget to Congress that would cut money for work under DOE’s Hanford Richland Operations Office by almost \$191 million to \$800 million.

The office is responsible for overall management of the Hanford nuclear reservation and all cleanup other than the 56 million gallons of radioactive waste in underground tanks and the vitrification plant being built to treat it.

That is the responsibility of the DOE Hanford Office of River Protection, which would see its budget increase by \$86 million to \$1.5 billion in fiscal 2017 under the administration's request.

"I find it unacceptable that the president's budget essentially robs Richland Operations to pay for the Office of River Protection's waste treatment mission," Murray said.

The proposed cut for the Richland Operations Office is almost double the cut proposed by the administration for the current fiscal year budget. Murray worked to restore that money.

"With those kinds of significant cuts, how will the administration meet its legally binding commitments to the Tri-Cities community?" Murray asked.

DOE is trying to use a limited total budget to address priorities, including those that have the highest risk, particularly liquid, or tank, waste held at several DOE sites, Moniz said.

Substantial progress has been made on Richland Operations Office projects, particularly in cleanup near the Columbia River. The proposed budget would cover major progress to complete the demolition of the Plutonium Finishing Plant and move radioactive sludge now in the K West Basin away from the river, he said.

But high-risk projects remain unfinished near the river and the city of Richland, Murray countered.

Murray said cleanup of the 324 Building, which sits above a highly radioactive spill, and completion of waste retrieval at the high-risk 618-10 Burial Ground are underfunded in the administration's budget proposal.

Moniz said that DOE cannot start digging up the dirt beneath the 324 Building until robotics technologies are developed specifically for the project.

Murray agreed that significant progress has been made in cleanup along the Columbia River under a plan to focus on that work first. But the Richland Operations Office still is responsible for central Hanford cleanup, she said. Central Hanford has about 1,000 waste sites and 500 facilities, plus contaminated groundwater to be cleaned up.

“All pose risks to the public, environment and work force,” Murray said. “And every year that those aren’t addressed, DOE spends millions on surveillance and maintenance.”

Moniz agreed to work with Murray to prioritize cleanup risks, and to prepare a detailed plan on how DOE would get the 324 Building and the 618-10 Burial Ground cleanup completed.

Alexander Says Obama’s Budget “Is At Best Unhelpful, And At Worst It’s Misleading”

The Chatanoogan

March 9, 2016

[LINK](#)

Sen. Lamar Alexander said on Wednesday that President Obama’s budget request for the Department of Energy proposes new mandatory funding that Congress will not approve.

“Governing is about setting priorities, and given our current fiscal constraints – especially on non-defense spending – we are going to have to make some hard decisions this year to make sure the highest priorities are funded,” Senator Alexander said.

Senator Alexander, who leads the Senate Appropriations Subcommittee on Energy and Water Development, said at a hearing with U.S. Energy Secretary Ernest Moniz today that doubling basic energy research, ending the 25-year-old nuclear waste stalemate, safely extending the licenses of existing nuclear

reactors and keeping large projects, such as the Uranium Processing Facility in Oak Ridge, on time and on budget should be the priorities.

The problem, Senator Alexander said, is Obama's budget for the Department of Energy proposes \$2.3 billion in new mandatory funding, including \$650 million for the so-called "Mission Innovation" initiative to support clean transportation and energy research and development.

"The budget writers know \$682 billion in new mandatory spending across all federal agencies over the next 10 years isn't a realistic proposal. Congress is not going to enact \$3.4 trillion in new tax increases over the next 10 years to pay for new mandatory spending," Senator Alexander said. "The president's budget request this year is at best unhelpful, and at worst it's misleading."

Instead of adding mandatory funding to the department's budget, Senator Alexander proposed doubling funding for energy research with money saved by ending subsidies for wind, oil and gas and other mature energy technologies.

"For example, we could start by eliminating the wind production tax credit in 2016, and putting the \$4 billion this subsidy costs taxpayers over 10 years toward doubling energy research. Or, we could phase out subsidies for oil and gas," Senator Alexander said. "Legislative proposals similar to the amendment I supported in February to repeal oil and gas subsidies could save \$24 billion over 10 years, which could be spent on research and development."

Mandatory spending, which funds entitlement programs like Social Security and Medicare, is projected to increase nearly 80 percent over the next 10 years and is the real driver of our nation's \$19 trillion debt. Mandatory spending does not require approval by Congress in an appropriations bill each year.

Discretionary spending, which funds our national defense, national laboratories and national parks, currently accounts for about 32 percent of the federal budget and is approved by Congress each year. Over the next ten years, discretionary spending will decrease from 32 percent of total federal spending in 2015 to about 22 percent in 2026, according to the Congressional Budget Office.

For a video of Sen. Alexander's remarks click [here](#).

Sen. Alexander's remarks as prepared follow:

We're here today to review the president's fiscal year 2017 budget request for the Department of Energy, a federal agency with three critical missions: nuclear security, science and energy, and environmental management.

The Department of Energy's budget request for fiscal year 2017 is about \$32.5 billion dollars. This is an increase of about \$2.9 billion over what Congress provided last year.

Governing is about setting priorities, and given our current fiscal constraints – especially on non-defense spending – we are going to have to make some hard decisions this year to make sure the highest priorities are funded.

And that is why we are holding this hearing: to give Secretary Moniz an opportunity to talk to us about the Department of Energy's most urgent priorities so Senator Feinstein and I can make informed decisions as we begin to put together the Energy and Water Appropriations bill over the next few weeks.

Today, I'd like to focus my questions on three main areas, all with an eye toward setting priorities:

Doubling basic energy research;

The future of nuclear energy;

Keeping large projects on time and on budget.

Doubling basic energy research

Supporting government-sponsored basic research is one of the most important things our country can do to encourage innovation, help our free enterprise system create good jobs, and make America competitive in a global economy.

Doubling basic research is a goal I've long supported.

We have increased investment in basic energy research through both our national laboratory system and the Advanced Research Projects Agency-Energy (ARPA-E), which Congress created as part of America COMPETES in 2007, which was passed unanimously by the Senate and authorized Congress to double funding for basic research over 7 years.

Last month Sen. Durbin and I co-sponsored an amendment to the Energy bill that increases the authorized funding levels for the Office of Science by about 7 percent per year which would double the Office of Science's budget from a little over \$5 billion today to more than \$10 billion in 10 years. The Senate adopted our amendment by voice vote.

The president has also proposed to invest more in basic research, including the Mission Innovation proposal - the pledge launched by the U.S. and 19 other countries at the Climate Summit in Paris to double federal clean energy research over the next five years.

The problem is that the president's budget request proposes \$2.259 billion in new mandatory funding for the Department of Energy. The mandatory funding would be used to support clean energy programs and replace several proposed cuts to programs that are currently funded with discretionary spending.

These new mandatory spending proposals include:

\$1.3 billion for 21st Century Clean Transportation Plan Investments;
\$674 million to replace discretionary spending cuts in cleanup programs;

\$100 million for new Office of Science University Grants;
And \$150 million to support ARPA-E.

However, the president's commitment to double federal clean energy research comes at the expense of other resources and agencies and he proposes to pay for this new mandatory spending with new tax increases.

The budget writers know this isn't a realistic proposal. Congress is not going to enact \$3.4 trillion in new tax increases over the next 10 years to pay for an additional \$682 billion in mandatory spending across all federal agencies over the next 10 years.

The president's budget request this year is at best unhelpful, and at worst it's misleading.

First, the president has underfunded the Army Corps of Engineers by \$1.4 billion and the cleanup of former Cold War sites by \$674 million. This makes it very difficult to draft an appropriations bill, much less fund the proposed new investments in Mission Innovation.

Second, I've called for doubling our investment in basic scientific research, but I've also recommended paying for increases by ending subsidies for mature technologies like wind and oil and gas subsidies.

For example, we could start by eliminating the wind production tax credit in 2016, and putting the \$4 billion this subsidy costs taxpayers over 10 years toward doubling energy research.

Or, we could phase out subsidies for oil and gas. Legislative proposals similar to the one I supported in February to repeal oil and gas subsidies could save \$24 billion over 10 years, which could be spent on research and development.

Out-of-control mandatory spending on entitlements, which is projected to increase nearly 80 percent over the next 10 years, is already crowding out discretionary spending.

Over the next ten years, discretionary spending will decrease from 32 percent of total federal spending in 2015 to about 22 percent in 2026.

The United States faces a choice between falling further behind competitors like China, or advancing technologies that can make us safer and more competitive.

But we have to be fiscally responsible and carefully invest our limited resources in programs that can achieve results.

For example, supercomputing is one priority we agree on – and it is critical to our economic competitiveness and a secure energy future.

By next year, the world's fastest supercomputer will again be in the United States, and in Tennessee through the joint Collaboration of Oak Ridge, Argonne and Lawrence Livermore (CORAL).

That computer will be called Summit, and it will help researchers better understand materials, nuclear power, and energy breakthroughs.

Funding the next generation, known as exascale, is essential to our both our country's competitiveness and national security.

Exascale computers will be capable of a thousand-fold increase in sustained performance over today's petascale computers – which have been operating since 2008.

The future of nuclear energy

Nuclear power provides 60 percent of our nation's carbon-free electricity, and it must be a part of any realistic energy plan.

It is reliable—unlike solar and wind, nuclear power works when the sun isn't shining or the wind isn't blowing.

It is safe—we've never had anyone die in a nuclear accident at any of our commercial reactors or in our naval fleet.

The Department of Energy has an important role in many of the key challenges in advancing nuclear power, including:

Safely extending the life of the nuclear reactors already operating today;

Solving the nuclear waste stalemate; and

Developing new nuclear technologies such as accident tolerant fuels, small modular reactors, and advanced reactors.

Safely extending the operating licenses of commercial reactors from 60 to 80 years, where possible, is an important step to maintaining our largest source of carbon-free electricity.

I'd like to hear today what the Department of Energy is doing to achieve this goal and whether there are any additional steps we should be taking.

Regarding nuclear waste, Federal law makes the government responsible for disposing of used nuclear fuel, and the government continues to fail in this responsibility.

I believe that Yucca Mountain can and should be part of the solution, but we have more used fuel than Yucca Mountain's legal capacity.

Senator Feinstein and I will again include a pilot program for nuclear waste storage in the Energy and Water Appropriations bill, as we have for the past four years to complement Yucca Mountain.

The NRC Chairman recently testified that they expect to see license applications for commercial sites to store used fuel later this year. I'd like to hear your views on the role commercial sites could play in the management of used nuclear fuel.

Finally, as we look to the future, the Department is funding key research and development that will help design the nuclear reactors of the future.

Small modular reactors offer an additional source of clean, cheap, reliable energy, and have the potential to make nuclear power available to places that could not otherwise build large-scale reactors. The Department's work to support licensing a small modular reactor continues, and I would like to hear your views on the progress of this important work.

The Department is also doing research and development to address technical, cost, safety and security issues with advanced reactor technologies. I look forward to hearing the progress you are making in this area, and am particularly interested in your estimate for when the first application for certification would be filed with the Nuclear Regulatory Commission.

Keeping large projects on time and on budget

The Department of Energy is responsible for some of the largest construction projects in the federal government, including the Uranium Processing Facility in Tennessee and the MOX Fuel Fabrication Facility in South Carolina; and the Department is a partner in the International Thermonuclear Experimental Reactor known as "ITER" in France.

Now that you are no longer recused from discussing fusion energy and the ITER project specifically, I want to discuss the future of U.S. participation in the project, and when we can expect to receive your recommendations and details on the new cost of the project.

Over the past five years, Senator Feinstein and I have worked hard with the Department to keep costs under control and to make sure hard-earned

taxpayer dollars are spent wisely. We need to make sure these projects are on time and on budget.

Senator Feinstein and I have focused much of our oversight on the Uranium Processing Facility in Tennessee, and I am glad to hear the Department continues to follow the Red Team's recommendations.

I look forward to a detailed update in the near future, including whether the project is still on time and on budget, and when the design will be 90 percent complete. We set a target of completion in 2025 at a cost of \$6.5 billion and we need to know if that is achievable.

Your budget request also proposes shutting down the MOX fuel facility in South Carolina and replacing it with a new plan to dispose of the plutonium in South Carolina. We have talked about this project many times.

Today, I hope to hear the details about your alternative to dilute the plutonium material and permanently dispose of it. Specifically, I want to make sure you have a clear plan for getting plutonium out of South Carolina as the Department has committed to do.

With that, I would recognize Senator Feinstein to make her opening statement.

Swiss nuclear waste arrives at Savannah River Site

Augusta Chronicle

March 10, 2016

[LINK](#)

The National Nuclear Security Administration this month announced that Switzerland is now free of all separated plutonium, partly because of a shipment of about 20 kilograms that arrived at Savannah River Site in February. The plutonium was initially used in research and development of

fuel elements for nuclear reactors and had been stored for several decades at the Paul Scherrer Institute in Villigen, Switzerland.

NNSA press secretary Francie Israeli this week said the operation was conducted by the Office of Material Management and Minimization, “which works cooperatively with countries to remove or dispose of high-risk nuclear materials at civilian facilities across the globe that could be used by terrorists to make an improvised nuclear device.”

The material arrived at SRS by way of Joint Base Charleston, S.C. Israeli said the NNSA determined that the shipment does not require the preparation of an environmental impact statement because it isn’t considered a major activity. An environmental assessment prepared in December, however, evaluated the impacts associated with transporting material from foreign countries to the U.S. for disposal.

“Through this cooperative effort, Switzerland has eliminated all the separated plutonium from its country, which supports international goals of consolidating and minimizing inventories of nuclear material,” said Anne Harrington, NNSA’s deputy administrator.

“These efforts are an example of the important nonproliferation mission of NNSA and an accomplishment for risk reduction that will be highlighted at the upcoming Nuclear Security Summit in Washington, D.C., later this month.”

U.S. Senate appropriators to debate funding for, and future of, the MOX program

Post-Courier

March 9, 2016

[LINK](#)

WASHINGTON — Concerns about the MOX project are starting to resonate with senior congressional lawmakers outside the South Carolina delegation.

U.S. Sen. Lamar Alexander, a Tennessee Republican who chairs the U.S. Senate Appropriations Subcommittee on Energy and Water Development, said on Wednesday he would “schedule additional time” to question Energy Secretary Ernest Moniz about funding and the future of the mixed oxide fuel fabrication program at the Savannah River Site.

“We’re talking about huge amounts of money,” Alexander told Moniz, who was testifying before the subcommittee on Wednesday afternoon on his agency’s fiscal 2017 budget request to Congress.

Alexander added his commitment to probing the issue further was in deference to U.S. Sen. Lindsey Graham, R-S.C.

The MOX program was originally launched to reprocess weapons-grade plutonium into commercial nuclear reactor fuel, the result of a 2000 agreement between the United States and Russia to destroy materials no longer necessary in a post-Cold War era. The project is now years behind schedule and billions of dollars over budget.

The Obama administration wants to halt MOX completely and deal with the remaining excess plutonium via a “dilute and dispose” approach, which it argues would be faster and cheaper. The White House has tried for several budget cycles to stop the initiative, and in its final budget request proposed spending just enough money to wind the project down.

But critics, like Graham and others in the S.C. congressional delegation, argue that shuttering MOX would mean reneging on its deal with Russia at a time when relations with the U.S. are strained. Closing MOX without having finished the task would result in financial waste, they say, and then there’s the practicality of how many jobs might be lost in the process.

On Wednesday, Graham pointed to a large chart he’d brought along for effect, a bird’s-eye view of the MOX facility in Aiken. “Do you agree this is real?”

Graham said to Moniz. “We spent \$5 billion. It’ll be a hell of a basketball court. I don’t know what we’ll do with it.”

He proceeded to hammer Moniz over why MOX was allowed to proceed for so long if its price tag was outrageous and its timetable was interminable. Moniz, who was only confirmed as Energy secretary in 2013, could only say he believed the contractors had been ill-informed and then proceeded to mislead stakeholders.

“It seems to me we started a project that apparently nobody knows if it even works,” Graham said. “Somebody should be fired for that.”

Meanwhile, though Graham should be heartened by Alexander’s interest in an issue of local concern, Alexander wasn’t entirely clear whose side he might land on in the end.

“The taxpayers are going to want to know from us why are we spending \$500 million, \$800 million, a year on something when we could have saved that much money, if that’s true,” Alexander said.

Emma Dumain is The Post and Courier’s Washington correspondent.